

Dentists' Use and Opinions of MEDLINE

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INTRODUCTION

For dentists, benefits of MEDLINE searching include extensive coverage of the dental literature, increased awareness of current topics, and availability of dental practice management articles. Presently, however, their use of MEDLINE is limited [1]. Thus, the goals of this project were to evaluate dentists' use and opinions of MEDLINE, and to determine the needs of this group for education about MEDLINE.

METHODS

A project was developed to provide dentists with MEDLINE education and unlimited access to this resource. Participants were solicited through journal advertisements and electronic mailings. To be eligible, participants had to be U.S. dentists practicing at least 20 hours a week in general practice. Overall, 348 dentists were recruited, and then surveyed by mail (response rate = 96%) to assess their use and opinions of MEDLINE prior to the education program. Data were available from 334 respondents. Demographic characteristics of respondents were compared with those of U.S. general dentists [2]. Respondents' library access, extent of literature searching, reasons for searching, and opinions of MEDLINE were evaluated.

RESULTS

The mean age of respondents was 45.5 (S.D.= 8.3) years, and the mean number of years since graduation was 18.6 (8.6). These dentists worked, on average, 48 (2.8) weeks per year and 38 (8.0) hours per week. The primary practice environment for 78% of respondents was urban or suburban.

The median distance to a health sciences library was 20 miles (range = 0-500 miles), and only 29% of respondents reported ever having used the library. About 18% of respondents reported ever using their home computer to perform a MEDLINE search. Overall, 67% of respondents reported doing no searches in the past year, 19% reported 1 to 5 searches, 7% reported 6 to 10 searches, and 7% reported more than 10 searches. Reasons for searching included current awareness (58%), direct patient care (58%), research (42%), and presentations (32%). Searches were delegated to others by 8% of respondents. Only 18% of respondents reported knowing a colleague who was searching MEDLINE.

Because respondents' use of MEDLINE was so limited,

most had no opinions about its utility. For example, when asked if MEDLINE was an improvement over searching the Index to Dental Literature, 54% had no opinion, while 44% agreed. Asked if MEDLINE took the challenge out of finding information, 54% had no opinion while 15% agreed. Asked if only a small proportion of health professionals would want to use MEDLINE, 34% disagreed, 42% had no opinion, and 25% agreed. About 69% of respondents agreed that learning MEDLINE skills should be part of a health professional's education.

DISCUSSION

Compared to U.S. general dentists [2], respondents were about the same age (45.5 versus 46.7), and worked similar numbers of weeks per year and hours per week. Further, the distributions of patient ages in the two groups were similar as were the percentages of patients covered by dental insurance. Likely, respondents are representative of U.S. general dentists for practice characteristics, but may differ in their experiences with technology because they volunteered to participate in an on-line project.

Since MEDLINE use was low, education and resource promotion among dentists are warranted. That 25% of respondents perceived MEDLINE as useful only to a few health professionals is a concern. A positive sign is that two thirds of respondents thought health professionals should receive MEDLINE education.

CONCLUSIONS

Currently, dentists' use of MEDLINE is low, hence their opinions about its usefulness are generally neutral. Educating dentists about MEDLINE appears to be warranted, and opportunities to try MEDLINE searching should be provided to this group.

REFERENCES

- [1]. Heirt C. Computer use by dentists and dental team members. *J Am Dent Assoc* 1997;128:91-5.
- [2]. American Dental Association. The 1995 survey of dental practice. Characteristics of dentists in private practice and their patients. Chicago:American Dental Association, 1996. 135pp.

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